Vitis palmata, Vahl.

Vitis palmata, Vahl, has been cultivated in the Paris Botanic Garden for one hundred years or more, and has thence found its way into other European gardens without, as it seems, attracting the attention of botanists. On the banks of rivers in Illinois, some eighty or ninety years ago, Michaux discovered this Vitis, which he, with the very scanty herbarium specimens before him, stowed away with his Vitis riparia, leaving, however, with it his original label: "Vitis rubra, abonde sur les rivières aux Illinois," but never even mentioning the name in his Flora. When, twentysix years ago, I studied Michaux's collections in the Jardin des Plantes, I was struck with the peculiarity of the specimens, especially with that which is preserved in the General Herbarium; its seeds were so odd that I almost suspected a confusion. In this country it seems to have remained quite unknown; in Torrey and Gray's Flora it is suggested that it might be a form of V. estivalis. Vahl's statement that it came from Virginia is. of course, erroneous, but not more so than many other American localities published in those, geographically, dark ages.

Mr. H. Eggert has had the good fortune to re-discover this species last fall, and collecting it again this summer, has furnished observations and specimens which permit me to complete the

history of this long neglected plant.

VITIS PALMATA, Vahl. A vigorous climber with red branches (and often also red petioles), young shoots, angular and ribbed, older ones losing the bark in large flakes; diaphragms rather thick; stipules very short, rounded, early deciduous; leaves smooth, glabrous (or on the nerves beneath with short, straight hairs), dull and rather dusky green, cordate with a broad sinus, mostly deeply three- or sometimes five-lobed, lobes when long, widest in the middle, contracted at base and mostly slenderly caudate-acuminate, with few coarse teeth; flowering racemes compound, long peduncled; berries black without any bloom, rather small (four to five lines in diameter); seeds large for the size of the fruit, slightly notched on top, single, and then nearly

¹ I may also say that in hunting through Michaux's Vitis, I came across a well characterized specimen of V. rupestris, also preserved in that sheet of V. riparia. As Michaux never botanized west of the Mississippi, where V. rupestris is found from Missouri to Texas, it remained a question where he could have obtained that specimen, which had no label attached to it, until a few years ago Dr. Gattinger discovered the species on sand-bars in the Cumberland river near Nashville, a region well explored by Michaux.

globose, or in twos, when they are hemispherical and very flat on the ventral side; beak very short, chalaza narrow, elougated,

groove without any visible rhaphe.

Michaux found it abundant on river banks in Illinois, but he may have confounded it with $V.\ riparia$, which is very abundant there. Mr. Eggert collected it in Missouri, on the Mississippi, in low bottom land, opposite Alton, not far above the mouth of the Missouri river, where it is found with $V.\ riparia$, flowering later than any other of our species here, in this very late season apparently not before the 15th or 20th of June; it matures in October, and the berries remain on the vine till November and later; their taste is sweet, without any disagreeable admixture.

The plant, like V. riparia, grows readily from cuttings.

The species resembles V. riparia in the broad sinus of the leaves and the form of the seeds, but it is distinguished by the deep red color of the stems, which are angular when young, not terete, the thick diaphragms, the very small stipules, the dull, dusky color of the leaves and the form of their lobes, the bloomless berries, the large seeds and the late flowering period. With V. cordifolia it has very little in common, except the thick diaphragm and the bloomless berries. The absence of a prominent rhaphe on the seeds distinguishes it at once, and no other species could possibly be confounded with it.—G. Engelmann, St. Louis, June 7, 1883.

Notulæ Californicæ.

Saxifraga malvæfolia, Greene. Bull. Torr. Club. IX. 121. In addition to the single specimen on which the species was founded, two more have lately come to light in the herbarium of the California Academy; and this further information has been obtained. The plant was collected by Dr. Kellogg and Mr. Harford, in the autumn of 1876, on Santa Cruz Island, not Santa Rosa, as stated in the note accompanying the printed character. All three of the specimens now known show strongly the woody fibrous root (without any trace of bulb, or tuber), the leaves appearing simultaneously with the flowers, and the broad calyx, which are the characters by which the species is well distinguished from the closely allied S. Parryi, Torr., known only on the main land in the south part of the State.

Lythrum Hyssopifolia, L., not accredited to California, was collected by the present writer, at Calistoga, as long ago as 1874, and is observed to be very common near the shore of the bay at West Berkeley.